Galileo International

Technical Support Documentation

FocalpointNet™ SE Multi-User

Manual Configuration Settings for WinGate™

(Subscriber Owned WinGate License & Hardware)

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INTERNATIONAL™

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Introduction

This document will explain how to set up the various services configured in WinGate™ to share access to the Galileo® or Apollo® reservation service.

A proxy server, or other Internet sharing software, is required when an Internet Service shares a single public IP address among all users on the Local Area Network. This is very common among Cable or DSL Internet Service Providers. Other providers may provide a public IP address for each PC on the Local Area Network. In this case, proxy software such as WinGate™ is not required. If you are unclear in the type of Internet addressing used by your ISP, please contact your ISP for additional clarification.

Galileo has chosen WinGate™ as the proxy solution for subscribers who choose to lease hardware from Galileo. Although WinGate™ is the solution Galileo has chosen, other proxy products may also support access to the Galileo® or Apollo® systems. Please contact your Galileo or Apollo Representative for additional information.

If you are using a firewall or firewall protection software, please download the Firewall & Proxy Settings document from http://support.galileo.com/aps and review the settings with the firewall or software manufacturer.

Where do I purchase WinGate™?

Galileo does not sell or lease WinGate™ Licenses for use on personal hardware. Subscribers should contact Deerfield Communications via the Internet at http://www.WinGate.com or http://www.deefield.com to purchase the appropriate licenses for their user.

Installation support for WinGate™ is not available from Galileo and questions about the installation or support of WinGate™ should be directed to Technical Support at Deerfield Communications.

You are strongly encouraged to review all technical information and installation instructions for WinGate™ prior to installing and configuring the product for Galileo® or Apollo® access.

What are WinGate™ Services?

WinGate™ uses "Services" to identify Internet messages and route them appropriately. Although WinGate™ configures standard Internet services, such as web browsing, at time of installation services such as Galileo® and Apollo® reservation messages are not.

This document will step you through configuring access to the following services:

- Focalpoint IPCS Connection (UDP Messages)
- Galileo & Apollo IPC Connection (TCP Messages)
- Focalpoint Print Manager™ (TCP Messages)

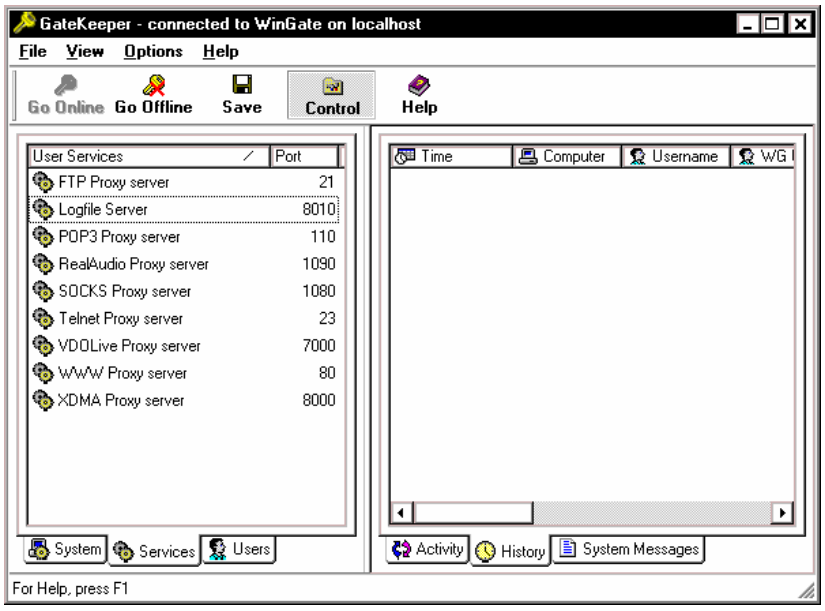
To configure the WinGate™ Services for Galileo® or Apollo®, you must have successfully installed WinGate™, in its Server Mode, on a PC designated as the WinGate Server.

Before proceeding, please log into the WinGate™ Gatekeeper.

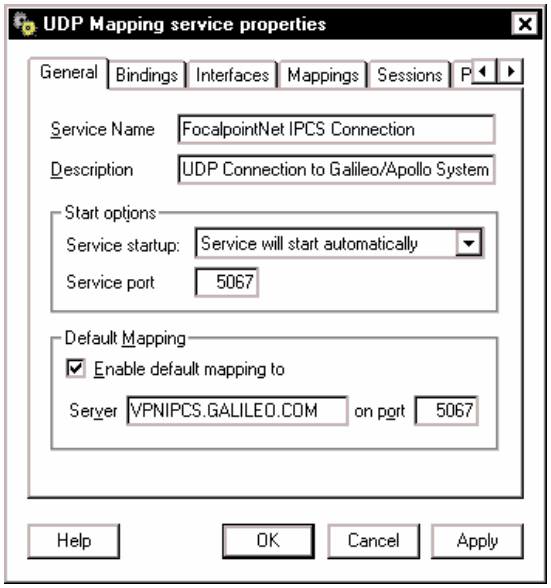
Creating a service for the Focalpoint® IPCS Connection

The Focalpoint IPCS or Configuration Servers are responsible for authenticating users to access the Galileo® or Apollo® reservation service via a TCP/IP or Internet connection. This service must be created as a UDP (User Datagram Protocol) Mapping Service.

Within Gatekeeper locate the currently configured services by clicking on the Services Tab.



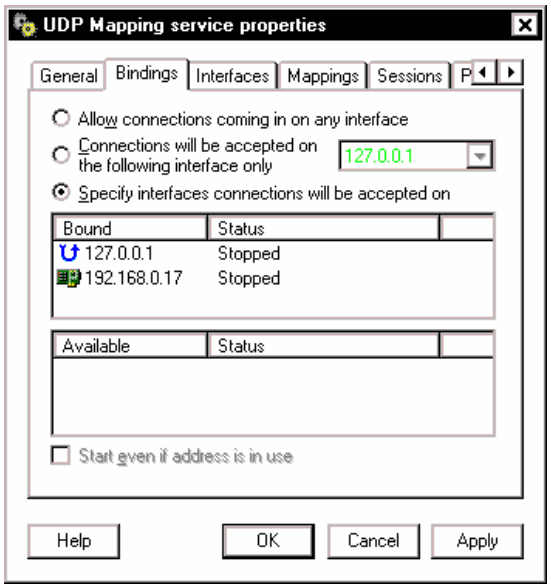
Right-click anywhere in the Services Window and Select **NEW SERVICE**. A list of available service types will appear. Select **UDP MAPPING SERVICE**.



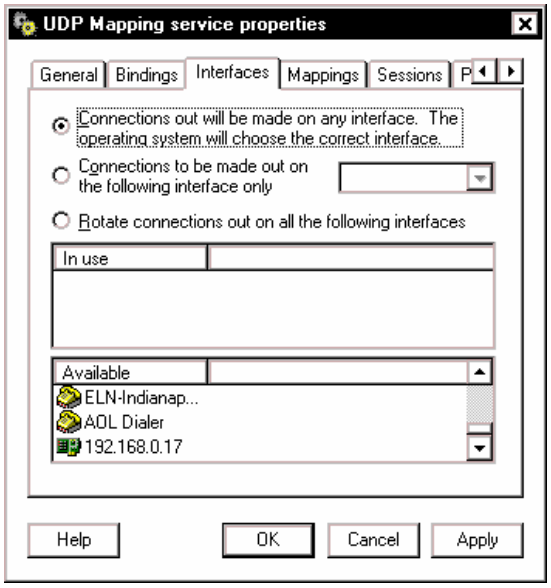
Configure the **GENERAL** tab as follows:

Service Name:	**FocalpointNet IPCS Connection**
Description:	**UDP Connection to Galileo/Apollo System**
Start Option:	Select: **Service will start Automatically**
	Service Port: **5067**
Default Mapping:	**CHECKED**
	Server: **VPNIPCS.GALILEO.COM**
	on Port: **5067**

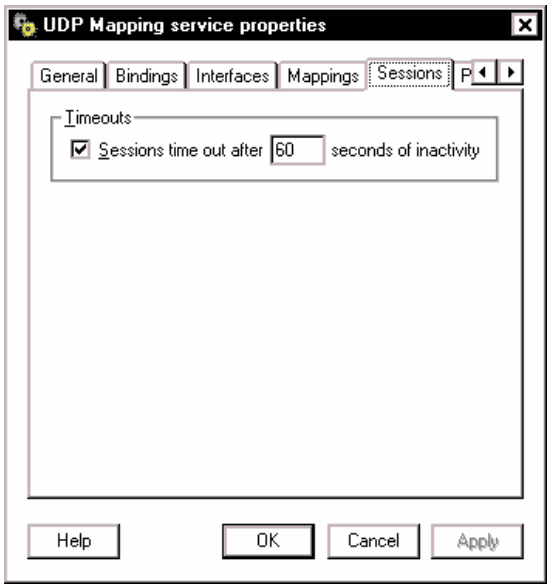
Next, select the **BINDINGS** tab.



Select SPECIFY INTERFACES CONNECTION WILL BE ACCEPTED ON and make sure the IP address of the Network Interface card as well as the WinGate Redirector (127.0.0.1) is present. Select the **INTERFACES TAB**.



Select the first option CONNECTIONS OUT WILL BE MADE ON ANY INTERFACE. Select the **MAPPINGS TAB**. Remove any mappings that may be present. Select the **SESSIONS TAB**.



Check the box "**SESSIONS TIME OUT AFTER**" enter 60 "**SECONDS OF INACTIVITY**.

Click **OK**.

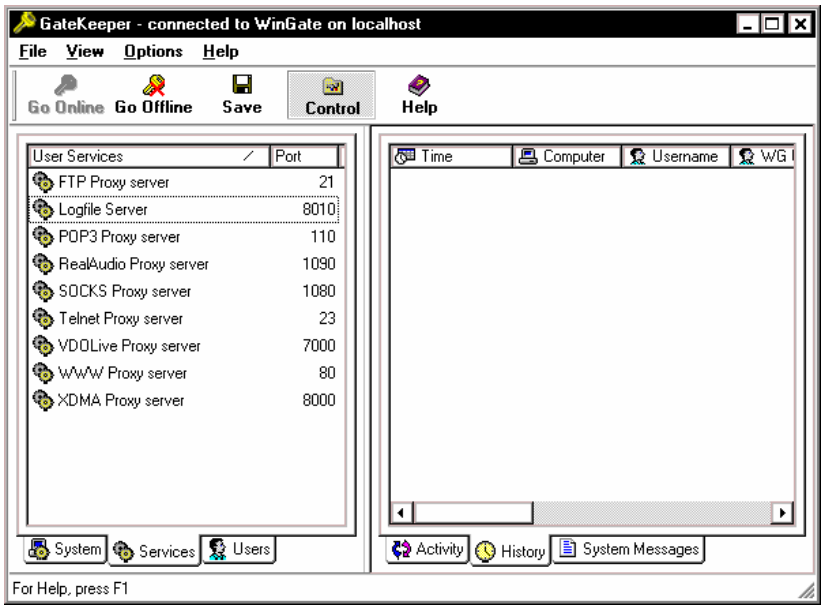
Remember: When finished configuring WinGate™ services, you must shut down and restart WinGate™ for the changes to be effective. You may also choose to reboot the PC/Server.

Creating a service for the Apollo® IPC Connection

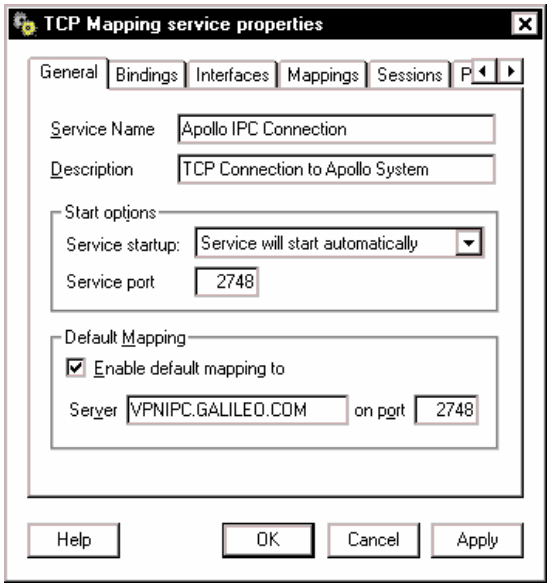
Note: Add this service only if you are connecting to the Apollo® reservation system

The Apollo IPC or IP Concentrators are the actual TCP/IP servers that communicate with the reservation system. This service must be created as a TCP (Transmission Control Protocol) Mapping Service.

Within Gatekeeper locate the currently configured services by clicking on the Services Tab.



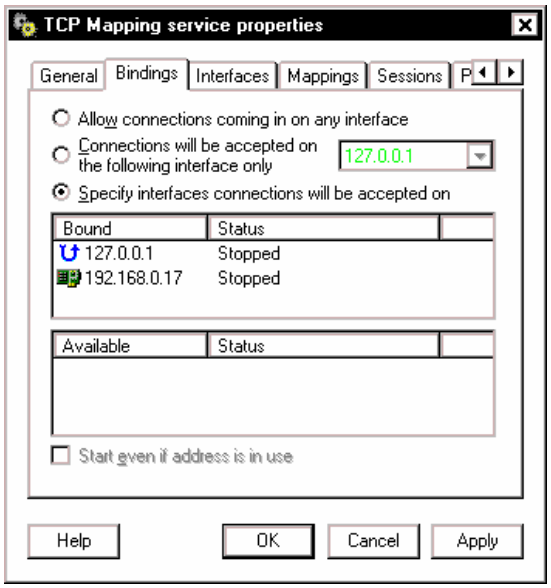
Right-click anywhere in the Services Window and Select **NEW SERVICE**. A list of available service types will appear. Select **TCP MAPPING SERVICE**.



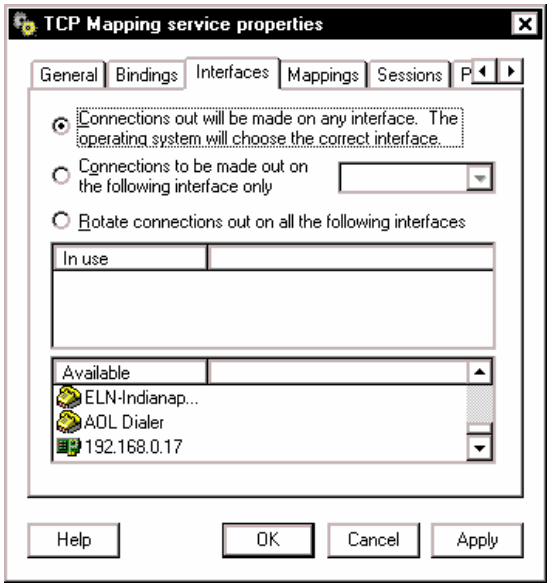
Configure the **GENERAL** tab as follows:

Service Name:	**Apollo IPC Connection**
Description:	**TCP Connection to Apollo System**
Start Option:	Select: **Service will start Automatically**
	Service Port: **2748**
Default Mapping:	**CHECKED**
	Server: **VPNIPC.GALILEO.COM**
	on Port: **2748**

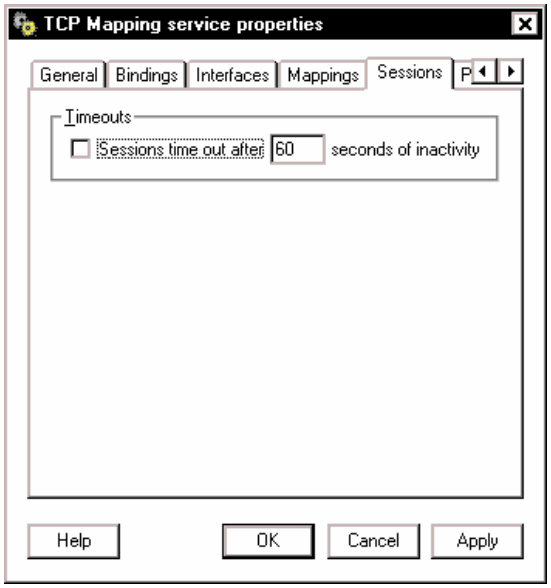
Next, select the **BINDINGS** tab.



Select SPECIFY INTERFACES CONNECTION WILL BE ACCEPTED ON and make sure the IP address of the Network Interface card as well as the WinGate Redirector (127.0.0.1) is present. Select the **INTERFACES TAB**.



Select the first option CONNECTIONS OUT WILL BE MADE ON ANY INTERFACE. Select the **MAPPINGS TAB**. Remove any mappings that may be present. Select the **SESSIONS TAB**.



Uncheck the box "**SESSIONS TIME OUT AFTER**".

Click **OK**.

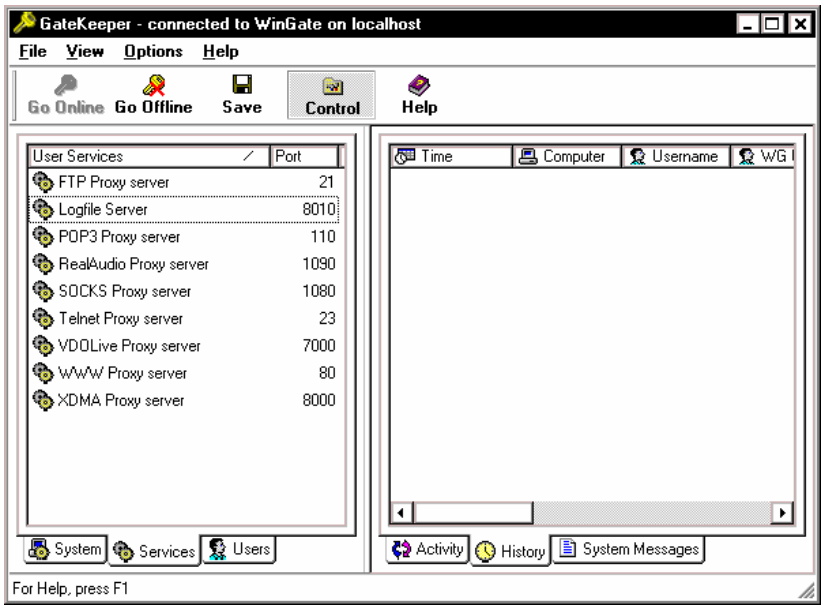
Remember: When finished configuring WinGate™ services, you must shut down and restart WinGate™ for the changes to be effective. You may also choose to reboot the PC/Server.

Creating a service for the Galileo® IPC Connection

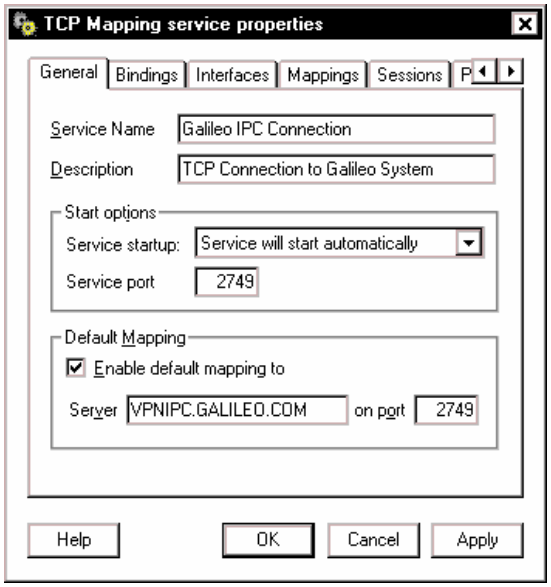
Note: Add this service only if you are connecting to the Galileo® reservation system

The Galileo IPC or IP Concentrators are the actual TCP/IP servers that communicate with the reservation system. This service must be created as a TCP (Transmission Control Protocol) Mapping Service.

Within Gatekeeper locate the currently configured services by clicking on the Services Tab.



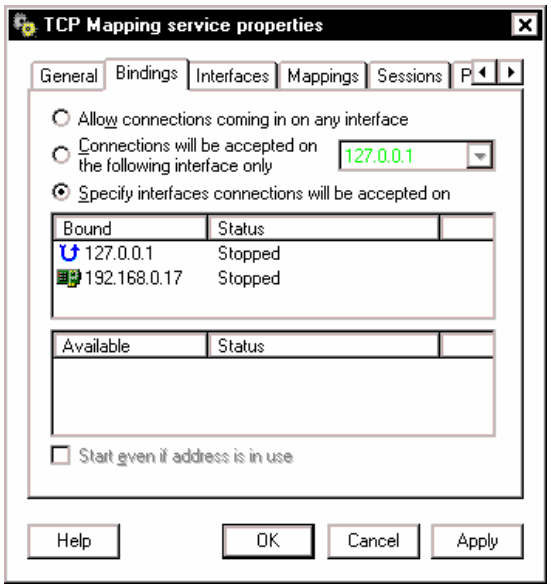
Right-click anywhere in the Services Window and Select **NEW SERVICE**. A list of available service types will appear. Select **TCP MAPPING SERVICE**.



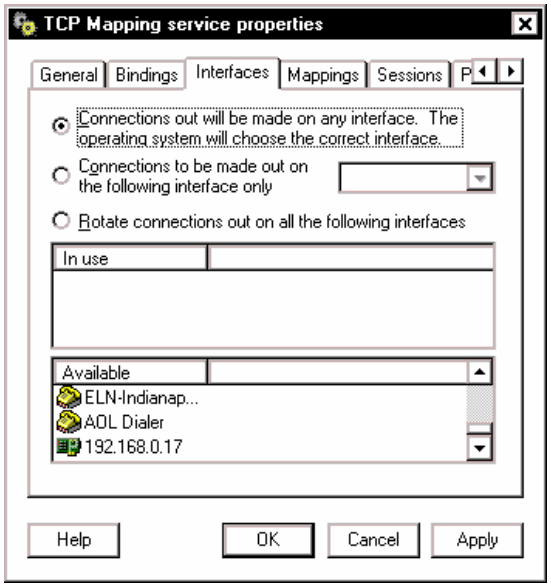
Configure the **GENERAL** tab as follows:

Service Name:	**Galileo IPC Connection**
Description:	**TCP Connection to Galileo System**
Start Option:	Select: **Service will start Automatically**
	Service Port: **2749**
Default Mapping:	**CHECKED**
	Server: **VPNIPC.GALILEO.COM**
	on Port: **2749**

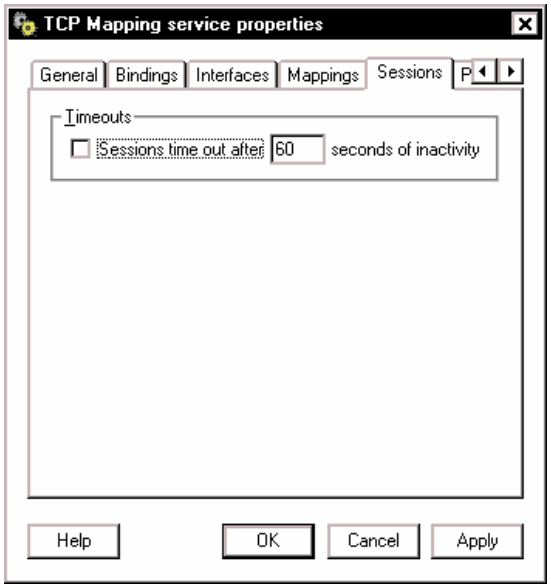
Next, select the **BINDINGS** tab.



Select SPECIFY INTERFACES CONNECTION WILL BE ACCEPTED ON and make sure the IP address of the Network Interface card as well as the WinGate Redirector (127.0.0.1) is present. Select the **INTERFACES TAB**.



Select the first option CONNECTIONS OUT WILL BE MADE ON ANY INTERFACE. Select the **MAPPINGS TAB**. Remove any mappings that may be present. Select the **SESSIONS TAB**.



Uncheck the box "**SESSIONS TIME OUT AFTER**".

Click **OK**.

Remember: When finished configuring WinGate™ services, you must shut down and restart WinGate™ for the changes to be effective. You may also choose to reboot the PC/Server.

Creating a service for down-stream Focalpoint Print Manager™

Note: These settings need to be completed ONLY if Focalpoint Print Manager™ is <u>NOT</u> installed on the same PC running as the WinGate Server. If Focalpoint Print Manager™ is running on that PC, or, Focalpoint Print Manager™ will not be installed at all, you may choose to skip these settings.

Focalpoint Print Manager™, commonly referred to as "FPM", is installed when accountable documents such as Airline Tickets, Invoice or Accounting Interface (MIR) are required. Galileo strongly recommends that the Focalpoint Print Manager™ software be installed and configured on the same PC running WinGate™. However if that is not possible and a "down-stream" PC (a PC other than the PC running WinGate™) has the Focalpoint Print Manager™ software installed, WinGate Service Mappings must be added so the Focalpoint Print Manager™ can wake when documents are issued.

If you plan on running Focalpoint Print Manager™ from a down-stream PC, you **<u>must</u>** notify your Apollo or Galileo Representative in advance so the print configuration database can reflect the change. Failure to do so will result in Focalpoint Print Manager™ failing to wake.

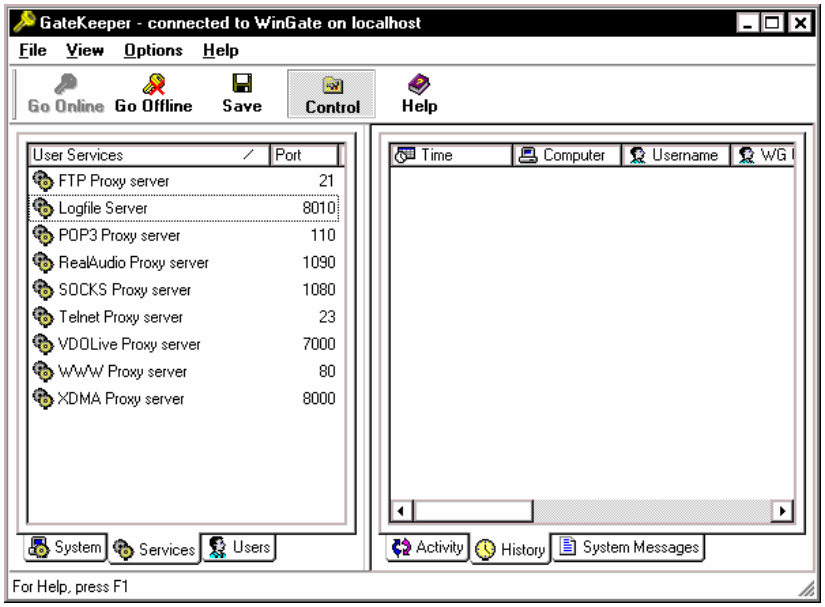
Once again, If you are **<u>NOT</u>** installing Ticket Printers, Itinerary Printers or Accounting Interface on a down-stream PC, you do not need these mappings.

You may add as many mappings necessary for the number of PC's running Focalpoint Print Manager™. We recommend the mappings be named:

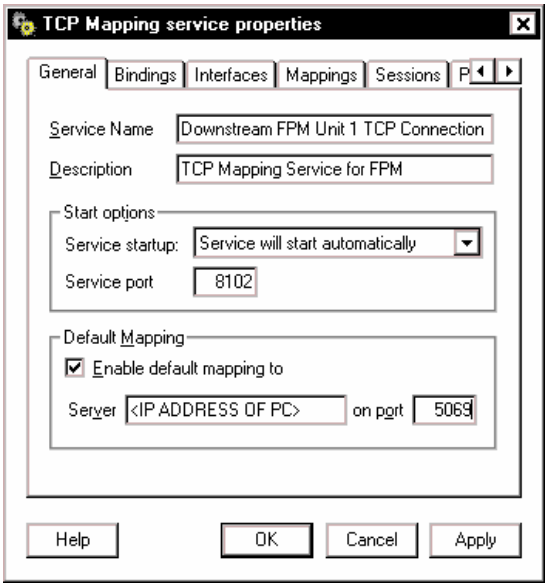
Downstream FPM Unit 1	Downstream FPM Unit 2
Downstream FPM Unit 3	Downstream FPM Unit 4

These sessions will all be mapped as a **TCP MAPPING SERVICE**

Within Gatekeeper locate the currently configured services by clicking on the Services Tab.



Right-click anywhere in the Services Window and Select **NEW SERVICE**. A list of available service types will appear. Select **TCP MAPPING SERVICE**.



Configure the **GENERAL** tab as follows:

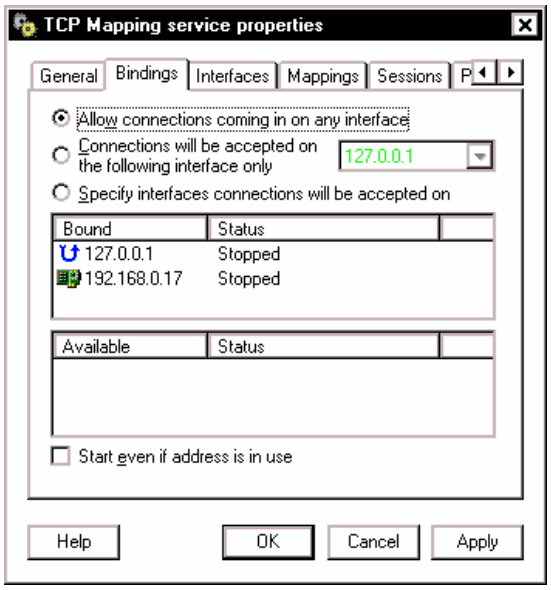
Service Name:	(*See note below)
Description:	**TCP Mapping Service for FPM**
Start Option:	Select: **Service will start Automatically**
	Service Port: (*See note below)
Default Mapping:	**CHECKED**
	Server: (**See note below)
	on Port: **5069**

*Note: The following matrix should be used to name and assign ports for more than one downstream Focalpoint Print Manager™:

Service Name	**Service Port**	
Downstream FPM unit 1 TCP Connection	=	8102
Downstream FPM unit 2 TCP Connection	=	8103
Downstream FPM unit 3 TCP Connection	=	8104
Downstream FPM unit 4 TCP Connection	=	8105

Note: The IP address indicated in the **DEFAULT MAPPING | SERVER setting is the IP address of the PC where that session Focalpoint Print Manager™ is installed. **THIS IP ADDRESS MUST BE STATIC AND NOT ASSIGNED BY DHCP (DYNAMICALLY).** Failure to fix an IP address will prevent the Focalpoint Print Manager™ from waking when a document is issued.

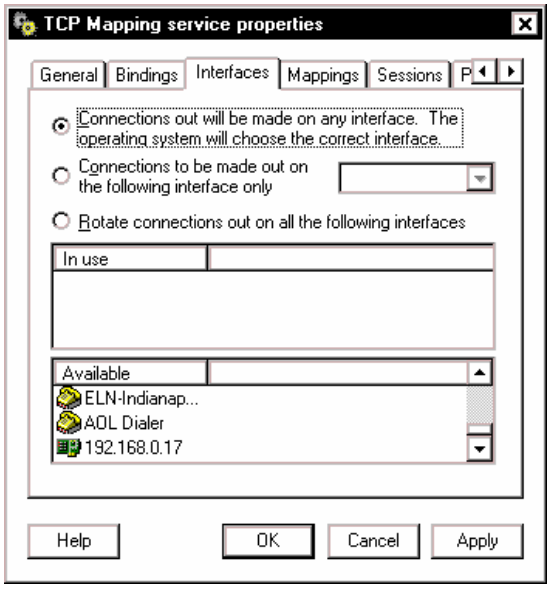
Next, select the **BINDINGS** tab.



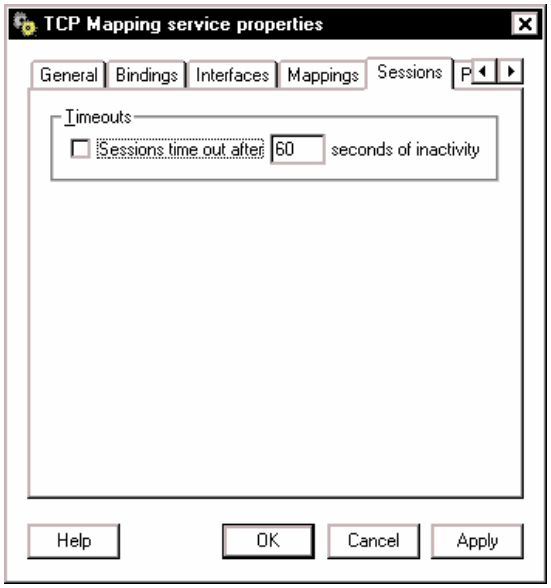
Unlike other mappings, you must specify that **ALLOW CONNECTIONS COMING IN ON ANY INTERFACE**.

WARNING: This setting will allow traffic to come into your Local Area Network via the Internet and may pose a **SECURITY RISK**. This is setting required by the Focalpoint Print Manager™ so the wake-up messages can be received. Please contact Deerfield Communications and your Galileo/Apollo Account Representative if you have additional questions about this setting.

Select the **INTERFACES TAB**.



Select the first option CONNECTIONS OUT WILL BE MADE ON ANY INTERFACE. Select the **MAPPINGS TAB**. Remove any mappings that may be present. Select the **SESSIONS TAB**.



Uncheck the box "**SESSIONS TIME OUT AFTER**" enter 60 "**SECONDS OF INACTIVITY**.

Click **OK**.

If necessary, continue adding mappings for additional Down-stream Focalpoint Print Manager™ Installations as indicated in this section.

Remember: When finished configuring WinGate™ services, you must shut down and restart WinGate™ for the changes to be effective. You may also choose to reboot the PC/Server.

Troubleshooting Connection Problems (Down-stream PC)

The Down-stream Workstations will use the VPN created on the PC running WinGate™. This section will address several areas to Troubleshoot when Focalpoint® or Viewpoint™ will not connect even with a successful connection on the on the PC running WinGate™.

Symptom 1: ALL PC's are not able to receive a successful download or connect to the host system.

Troubleshooting:

- Check the PC running as the WinGate server. Is the VPN running? Can you connect to Focalpoint® from the PC running WinGate™? Can you "PING" the Galileo servers VPNIPC.GALILEO.COM and VPNIPCS.GALILEO.COM and receive an IP address back? If not, disconnect and reconnect VPN. The problem may be with your ISP if you are unable to resolve those DNS names.
- Check your Bindings. Are all Services added for Apollo® or Galileo® access bound properly? You should bind to the Network Interface Card of the LAN where the WinGate PC is installed and the WinGate™ redirector interface (127.0.0.1). If the PC has two NIC cards, the FIRST card should be the one connected to the LAN and services bound to it. The SECOND card should be connected to the ISP or Internet Service.
- In the Galileo TCP/IP Configuration located in Windows Control Panel, make sure the client ID is entered properly and have selected to USE DOMAIN NAME SERVICES. The Configuration Server Name and IP Concentrator Name should be the same network Host Name of the PC running WinGate™. PING the workstation name used in the Focalpoint® configuration. Galileo uses the PC name WINGATE but that may or may not be the name used during installation. If you can PING the PC running WinGate™, verify the IP address is the correct address assigned to the WinGate PC. If the address is not correct, or you are unable to PING, a Local Area Network problem exists.
- Check with the your Galileo/Apollo Representative to see if the Database was configured properly.

Symptom 2: Some of the PC's can access the host system while others can not.

Troubleshooting:

- Check your WinGate™ license. Do you have a large enough license for the number of Focalpoint® or Viewpoint™ users? If not, contact Deerfield Communications to increase the number of licenses.
- In the Focalpoint® TCP/IP Configuration located in Windows Control Panel, make sure the client ID is entered properly and have selected to USE DOMAIN NAME SERVICES. The Configuration Server Name and IP Concentrator Name should be the same network Host Name of the PC running WinGate™. PING the workstation name used in the Focalpoint® configuration. Galileo uses the PC name WINGATE but that may or may not be the name used during installation. If you can PING the PC running WinGate™, verify the IP address is the correct address assigned to the WinGate PC. If the address is not correct, or you are unable to PING, a Local Area Network problem exists.

- Enter a Client Identifier from a PC that is working. Make sure the Client ID is not in use by another user. Launch Focalpoint® and try to establish a download. If successful with another Client Identifier, contact your Galileo/Apollo Representative to see if the Database was configured properly. If unsuccessful, a network problem appears to be causing the problem.

Symptom 3: Users seem to get disconnected from the host system.

Troubleshooting:

- Check the Sessions tab for the various Galileo® and Apollo® services. Only the UDP settings for the Focalpoint® IPCS should be set with a Timeout. All remaining services should be UNCHECKED.
- Check the Client Identifiers and make sure none are in use by other PC's. Two users attempting to access the host system at the same time will cause one to be kicked off. When that person gets re-established, the other will get kicked off.
- Report the problem to your Galileo/Apollo Representative. A database conflict may be present.

Frequently Asked Questions

All my users can access the Internet at the same time, why do I need WinGate™?

Most Internet services, such as web browsing can be shared among several users. The use of the VPN solution provided with FocalpointNet™ requires users to access the Galileo® or Apollo® host system with a unique address. If that is not possible, and the Internet IP address provided by the ISP must be shared, a Proxy Server solution, such as WinGate™ must be used. This allows all users to share the one VPN tunnel that can be created to access the Galileo® or Apollo® system. Internet Service Providers who offer their subscribers more than one IP address for the Local Area Network may not need a proxy solution.

Can more than one workstation share the same Client Identifier?

Client Identifiers can be entered on any number of PC's but only one PC can access the host system at a time. If two users attempt to access the host system, one will get kicked out.

Can my users take the Client Identifiers and use FocalpointNet™ from home?

No. Client Identifiers used with ISP's using only a single public IP address for Internet Access will not function in a single user mode. You will need to obtain additional Client Identifiers for users who wish to use FocalpointNet™ from home.

Will my Local Area Network be more secure if I installed a Firewall?

Network Security is very important and Galileo encourages subscribers to discuss security with their ISP. Access to the Galileo® and Apollo® system requires certain ports to be open and accessible for the access products to work. Closing any port mentioned in this document may prohibit products from functioning.

We use Viewpoint™ for our reservations is there any different settings for that product?

No. The WinGate™ settings mentioned in this document are universal for all Galileo® and Apollo® access products.

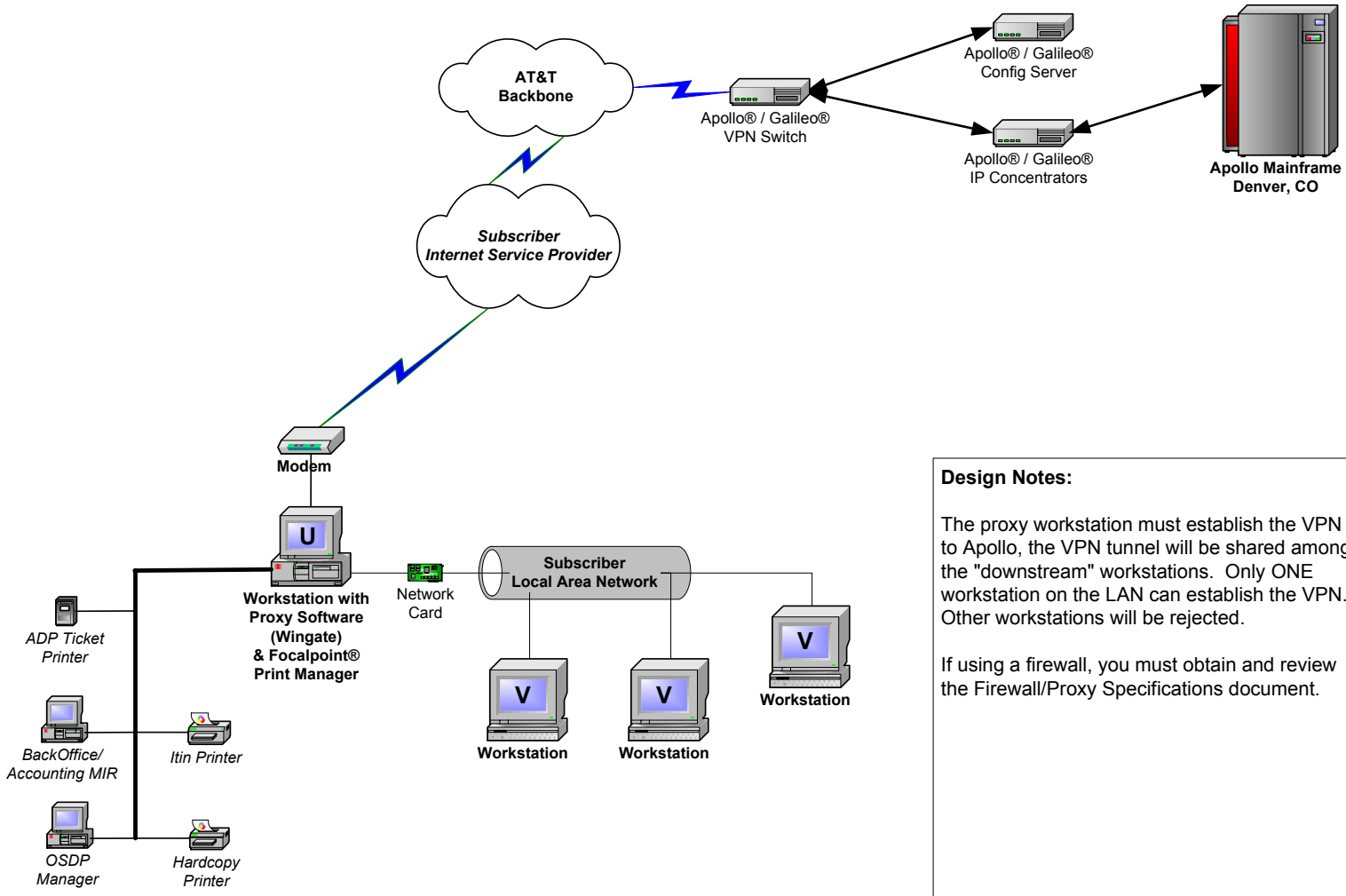
All my PC's on the LAN can access the Internet at the same time. Do I really need WinGate™

Access to the Internet does not guarantee access to the Galileo® or Apollo® systems. If your ISP provides unique and individual public IP addresses for each user, then you may be able to install FocalpointNet™ without the need for WinGate™. It is more common that ISPs do NOT support this type of Internet access and a single, shared IP address is used. WinGate is used not to share only Internet but to share the VPN Tunnel required by FocalpointNet™

Appendix A - WinGate™ Service Setting Matrix

	Focalpoint® IPCS Connection	Apollo® IPC Connection	Galileo® IPC Connection	Down-stream FPM Unit 1	Down-stream FPM Unit 2	Down-stream FPM Unit 3	Down-stream FPM Unit 4
APPLIES TO HOST:	Apollo & Galileo	Apollo Only	Galileo Only	Apollo & Galileo	Apollo & Galileo	Apollo & Galileo	Apollo & Galileo
NEW SERVICE TYPE:	UDP Service	TCP Service	TCP Service	TCP Service	TCP Service	TCP Service	TCP Service
GENERAL TAB:							
Service Name	FocalpointNet IPCS Connection	Apollo IPC Connection	Galileo IPC Connection	Downstream FPM Unit 1 TCP Connection	Downstream FPM Unit 2 TCP Connection	Downstream FPM Unit 3 TCP Connection	Downstream FPM Unit 4 TCP Connection
Description	UDP Connection to Galileo/Apollo System	TCP Connection to Apollo System	TCP Connection to Galileo System	TCP Mapping Service for FPM	TCP Mapping Service for FPM	TCP Mapping Service for FPM	TCP Mapping Service for FPM
Service will Start	Automatically	Automatically	Automatically	Automatically	Automatically	Automatically	Automatically
Service Port	5067	2748	2749	8102	8103	8104	8105
Def Map | Server	VPNIPCS. GALILEO.COM	VPNIPC. GALILEO.COM	VPNIPC. GALILEO.COM	(IP address of PC running FPM)	(IP address of PC running FPM)	(IP address of PC running FPM)	(IP address of PC running FPM)
Def Map | on Port	5067	2748	2749	5069	5069	5069	5069
BINDINGS TAB:							
Select	3rd option: Specify Interfaces	3rd option: Specify Interfaces	3rd option: Specify Interfaces	1st option: Allow on any interface	1st option: Allow on any interface	1st option: Allow on any interface	1st option: Allow on any interface
Bind To	127.0.0.1 and IP of LAN Interface	127.0.0.1 and IP of LAN Interface	127.0.0.1 and IP of LAN Interface	***Note: This will allow connection from Internet!***	***Note: This will allow connection from Internet!***	***Note: This will allow connection from Internet!***	***Note: This will allow connection from Internet!***
INTERFACES TAB:							
Select	1st Option: Connection out on any interface.	1st Option: Connection out on any interface.	1st Option: Connection out on any interface.	1st Option: Connection out on any interface.	1st Option: Connection out on any interface.	1st Option: Connection out on any interface.	1st Option: Connection out on any interface.
SESSIONS TAB:							
Timeouts	Checked	Unchecked	Unchecked	Unchecked	Unchecked	Unchecked	Unchecked
# Seconds Inactivity	60	N/A	N/A	N/A	N/A	N/A	N/A

Appendix B - WinGate™ Configuration using Dial-up Internet Service

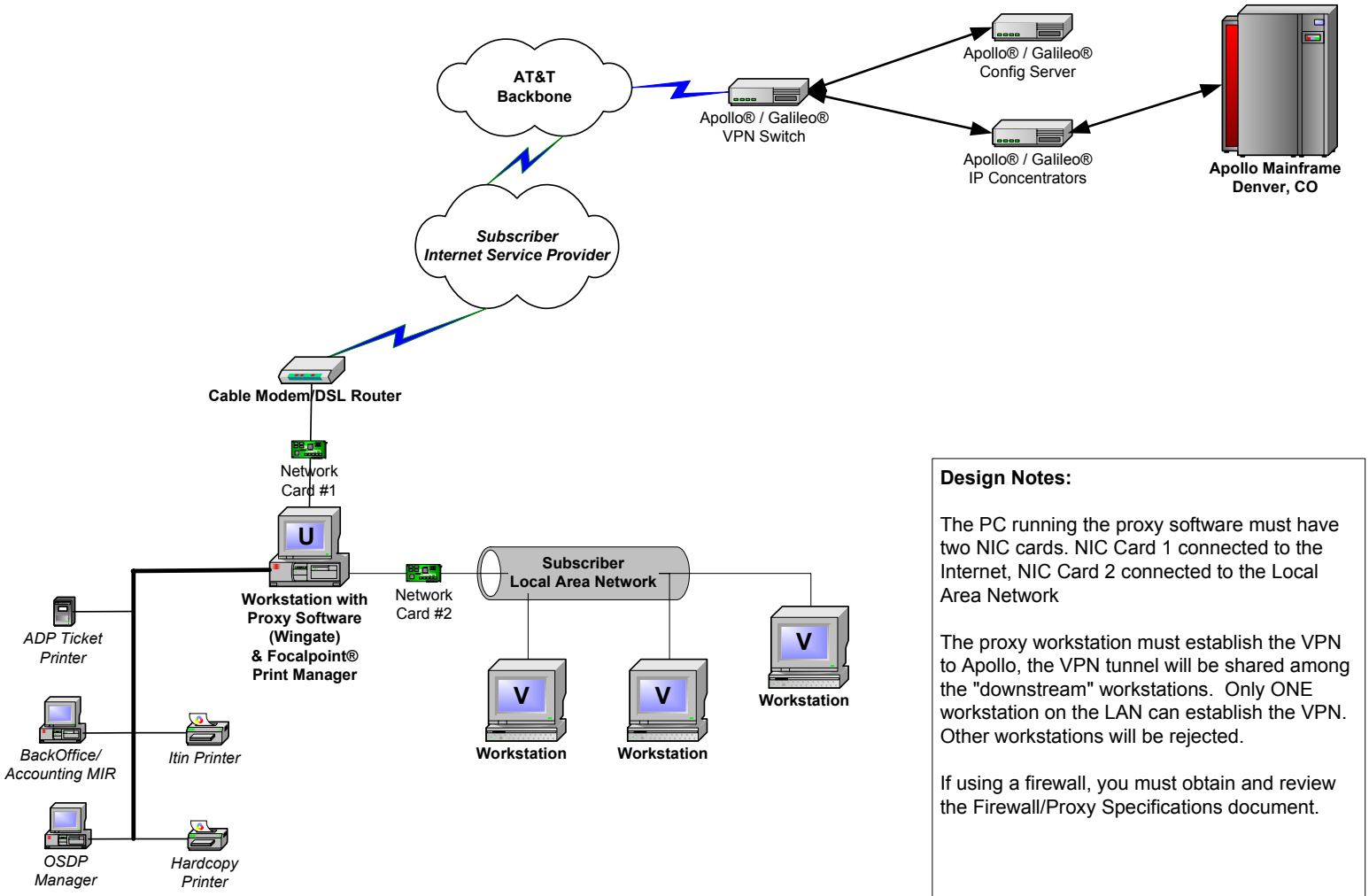


Design Notes:

The proxy workstation must establish the VPN to Apollo, the VPN tunnel will be shared among the "downstream" workstations. Only ONE workstation on the LAN can establish the VPN. Other workstations will be rejected.

If using a firewall, you must obtain and review the Firewall/Proxy Specifications document.

Appendix C - WinGate™ Configuration using Broadband Internet Service



Design Notes:

The PC running the proxy software must have two NIC cards. NIC Card 1 connected to the Internet, NIC Card 2 connected to the Local Area Network

The proxy workstation must establish the VPN to Apollo, the VPN tunnel will be shared among the "downstream" workstations. Only ONE workstation on the LAN can establish the VPN. Other workstations will be rejected.

If using a firewall, you must obtain and review the Firewall/Proxy Specifications document.